

Customer No.: 31561
Docket No.: 12556-US-PA
Application No.: 10/710,076

REMARKS

This is a full and timely response to the outstanding non-final Office action electronically delivered on July 17, 2007. Applicants hereby respectfully request entry of the amendments to claims 1, 4, and 6 as set forth hereinbefore to place the present application in condition for allowance. No new matter has been added to the application by virtue of the present amendments, and reconsideration and allowance of the application and presently pending claims 1-10, as amended, are earnestly requested.

Present Status of the Application

In the non-final Office action, claims 1-3 and 6-10 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Ausems et al. (US2001/00044321, hereinafter "Ausems") in view of Parulski et al. (US6292218, hereinafter "Parulski"), and further in view of Toma et al. (US6707498, hereinafter "Toma"). Claims 4 and 5 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Toma in view of the Internet publication CMOS versus CCD & What's It All Mean? (Canon EOS D30 Digital SLR Review, hereinafter "Canon").

In response thereto, claims 1, 4, and 6 has been amended. Upon entry of the aforesaid amendments, the aforesaid rejections should be withdrawn, and sufficient consideration of the present pending claims 1-10 is earnestly solicited.

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Discussion of Claim Rejections under 35 U.S.C. 103(a)

Claim 1-3 and 6-10 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Ausems in view of Parulsk, and further in view of Toma. Claims 4 and 5 and 9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Toma in view of Canon.

To establish a *prima facie* case of obviousness under 35 U.S.C. 103(a), each of three requirements must be met. First, the reference or references, taken alone or combined, must teach or suggest each and every element in the claims. Second, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skilled in the art, to combine the references in a manner resulting in the claimed invention. Third, a reasonable expectation of success must exist. Moreover, each of the three requirements must "be found in the prior art, and not be based on applicant's disclosure." See M.P.E.P. 2143, 8th ed., February 2003.

The Office Action rejected claims 1-3 and 6-10 under 35 USC §103(a). In the Office Action, the examiner recites that Ausems discloses a PDA which comprises a display screen having a rectangular shape with a width-to-height aspect ratio smaller than 1 and admits that Ausems does not explicitly teach that the photosensitive area is rectangular in shape with a width-to-height aspect ratio smaller than 1. Parulski discloses the concept of matching the aspect ratio of the effective area of an image sensor to the aspect ratio of the intended display screen. Tome discloses the concept of a solid-state imaging device having a width-to-height aspect ratio smaller than 1.

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Referring to col. 8, lines 1-7 of Parulski, it recites that the complexity of the camera can be simplified by directly mapping the RGB sensor pixels to the RGB pixels of the display. The easiest way to do this for the 512 lines x 768 pixels (3:2 aspect ratio) image sensor is to have an LCD display with 512x768 pixels and the same aspect ratio and color filter pattern.

Moreover, referring to col. 8, lines 8-10 of Parulski, it recites that in order to save the cost, LCDs have fewer display pixels are adopted. However, the aspect ratio of the LCD is usually 4:3, such that a diagonally striped RGB pattern as depicted in FIG. 1B is used for adjustment and finally a LCD pixel array with the size of 240 lines x 312 pixels is obtained. However, the aspect ratio of the LCD (240 x 312) is different from the aspect ratio of the image sensor (512 x 768). Accordingly, it is concluded that the size of the image sensor as recited by Parulski is the same as the size of the display screen. If a fewer display is adopted, a diagonally striped RGB pattern is used and the aspect ratio of the actual LCD is different from that of the image sensor.

Referring to FIG. 3 of the present application, the aspect ratios of the photosensitive chip and the display screen are substantially equal, but the sizes of the photosensitive chip and the display screen are different, which is neither taught nor suggested by Parulski. Based on the foregoing, the applicant amends claim 1 so as to limit the size of photosensitive chip to be smaller than the size of the display screen. Moreover, the feature that the aspect ratios of the photosensitive chip and the display screen are substantially equal as claimed in claim 2 is added to claim 1. Therefore, for at least the reasons and the amendment advanced hereinbefore, claim 1 of the present invention is novel, unobvious,

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and allowable.

Referring to Ausems and Toma, only the device with a display having an aspect ratio smaller than 1 is disclosed. There are no relations between the size of the photosensitive chip and the display screen mentioned. Therefore, it is concluded that these two prior art references do not establish any suggestion, teaching, or motivation that would have led a person of ordinary skill in the art to combine the relevant prior art teachings in the manner claimed. Accordingly, a prima facie case of obviousness has not been established, and thus the rejection under 35 USC §103(a) for claim 1 therefore should be withdrawn.

The Office Action rejected claims 6-10 under 35 USC §103(a). Based on the foregoing, the applicant amends claim 6 so as to limit the size of photosensitive chip to be smaller than the size of the display screen. Moreover, the feature that the photosensitive area of the photosensitive chip has a rectangular shape with a second height and a second width and the aspect ratio obtained by dividing the second width by the second height is smaller than 1 as claimed in claim 7 and the feature that the aspect ratios of the photosensitive chip and the display screen are substantially equal as claimed in claim 8 are added to claim 6.

The Office Action rejected claims 4 and 5 under 35 USC §103(a). Similarly, based on the foregoing, the applicant amends claim 4 so as to limit the size of photosensitive chip to be smaller than the size of the display screen. Moreover, the feature that the aspect ratios of the photosensitive chip and the display screen are substantially equal as claimed in claim 5 is added to claim 4.

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Therefore, it is concluded that these two prior art references do not establish any suggestion, teaching, or motivation that would have led a person of ordinary skill in the art to combine the relevant prior art teachings in the manner claimed. Accordingly, a prima facie case of obviousness has not been established, and thus the 103 rejections of claim 4 and 6 depending therefrom should be withdrawn.

For at least the reasons advanced hereinbefore, independent claims 1, 4, and 6 of the present invention are novel, unobvious, and allowable. Since claims 3, 5, 9 and 10 depend upon the allowable independent claims 1, 4, and 6, they are also novel and should also be allowable as a matter of law.

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CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-10 are in proper condition for allowance and an action to such effect is earnestly solicited. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Date :

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Respectfully submitted,

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